

A CLINICAL APPROACH TO FOREIGN LANGUAGE ACHIEVEMENT

By
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Two years ago I was called in as a psychological consultant by a Government Agency which was interested in sending some of its employees to a local university for instruction in Russian. In addition to myself there was another consultant, a linguistic scientist renowned for his persuasive powers and executive acumen. It was, therefore, not very long before the officials of this Agency had agreed to enroll students in an experimental, intensive Russian language program. But the inevitable question came up. Said one of the officials, "Even though we do our best in picking those employees who should or could benefit the Government from their study of Russian, are there not language aptitude tests that can be given before the students are enrolled, in order to weed out those who are inept in the learning of languages?"

The linguistic scientist up and spoke, "It is best to enroll the student and let the instructor decide, after a week or two, whether the student has the capacity to learn the language. To the best of my knowledge, " he said, "there are at the present time no valid tests of language aptitude."

Naturally, we tangled horns. It was a good thing that we did, because we began a series of experiments on language aptitude, working together, trying to assemble the knowledge we needed for the prediction of language proficiency. Although he was quick to challenge statements unsubstantiated by evidence, Professor Leon Dostert was even quicker to cooperate in the search for the evidence. He was, of course, right that there were no language aptitude tests valid or even suitable for much of the intensive, improved forms of language instruction which you linguistic scientists have developed in recent years.

One of the first things we agreed to do was to give the first class of 13 students a battery of psychological tests before they

began their language course. These tests included: Verbal Intelligence, Iowa Language Aptitude, English Usage, Reading Speed, Reading Comprehension, Ability to Follow Oral Directions, a short outline for educational and vocational data, a personality inventory, and a so-called "Written Interview Questionnaire" which easily lent itself to "projective" responses by the student. Within a few days the tests were scored, the questionnaires analyzed, and I sat down to study not only the test scores but the pattern of the student's life history including such aspects as the amount and kind of education he had received, whether or not he had earned honors, if he had studied languages before and how much and what kinds, marital status and number of dependents, fluency in writing, level of motivation, and so forth. At least one hour was devoted to the study of each student's folder, at the end of which I gave the student a language aptitude rating of A, B, C, D, E, or F with plus or minus modifiers following each letter rating, when necessary. When the characteristics of each student had been studied and a rating made for each one, the students were ranked in the order in which I believed they would be ranked for language achievement by the instructors at the end of the course, in terms of quartiles, 1st, 2nd, 3rd, and 4th. I did not know and had not met the instructors in the course, and except for general information as to the nature of the course, I knew nothing about it, and had not myself ever studied Russian. The predicted end-of-course achievement ranking of students was written up in memo report form and given to the responsible Agency training official. It is a matter of record. The Agency official who was shown the report merely commented, "Don't you think you've gone a bit too far out on a limb?" We made it a point, this training official and I, to let it be known that predictions had been made, but the envelope which contained the predictions was sealed and its contents not divulged to anyone else until the end of the course.

When the Georgetown end-of-course achievement rankings were obtained from Professor Leon Dostert we discovered a most amazing relationship. In 12 of the 13 cases, the predictions in respect to quartile placement were right on the button. The only mistake made in the 13 cases was to predict that a female student would be in the 2nd quartile; she landed in the 3rd quartile. In 12 out of 13 cases there was definite agreement between the predictions of the psychologist and the achievement rankings made by the Chief Instructor and reviewed by Professor Dostert. And, mind you, I did not personally know the students; I had never interviewed them. I knew them in terms of their test scores and the information and answers they had supplied about themselves in response to questions we had phrased.

This experiment is not cited to prove that I am possessed of powers of extra-sensory perception, but merely in order to show that it is possible by means of careful, individual study of a student's psychological folder to derive reasonably accurate predictions of language achievement. There is, of course, one very

serious limitation to the widespread use of this technique: professional psychologists trained and interested in doing this sort of work are in short supply. Realizing that we could not continue to invest my time in this kind of program, we undertook to administer to all our students scheduled to study Russian at the Georgetown Institute of Languages and Linguistics a wide battery of psychological tests in order to find those which would have the greatest predictive value.

You will be interested to know that in a preliminary run involving a sample of from 55 to 70 students we found positive product-moment correlations between aptitude test scores and instructors' ratings of language achievement at the end of the course as follows:

Following Oral Directions (Army Alpha, Subtest #1)33
Modern English Usage Test (Antonia Bell Morgan)35
Reading Speed Test (Minnesota)40
Verbal Intelligence Test (A.B. & W.J. Morgan)42
Reading Comprehension Test (Adaptation of AGO/OGT)52
Henmon-Nelson Test of Mental Abilities60

All the correlations were significant, and the trend was almost identical when the correlations were on the basis of instructors' rankings in class rather than instructors' ratings. The rankings and ratings were based on proficiency examinations of language achievement.

We carried out a more detailed study of the Iowa Foreign Language Aptitude Examination. In 163 cases we obtained a correlation of .58 for rank in class and Iowa scores, and a correlation of .48 between the instructors' ratings and Iowa scores. For these 163 cases a four-fold expectancy table shows us that if we had set the 50th percentile point on the Iowa norms as the critical point for selecting or rejecting students for language training we would have been right in 80 percent of the cases in the sense that those we accepted would have obtained Superior, Excellent, or Satisfactory evaluations at the end of the course, and those we rejected would have obtained Mediocre, Poor, or Failure evaluations at the end of the course. But by so doing we would have let in 8 percent that would do below-average work in spite of being above the 50th percentile on the Iowa, and we would have rejected 12 percent that would have done above-average language work in spite of Iowa scores below the 50th percentile.

Now this finding is very interesting when we contrast it with

the findings obtained from the experiment concerned with an individual analysis of each student. In the Iowa study we have a predictive efficiency of 80 percent, whereas in the individual analysis of the 13 cases we have a predictive efficiency of 92 percent. Statistically, I am probably not justified in assuming a reliable difference between these two experiments, but since my paper is concerned with clinical interpretations I should like to be permitted to speculate as to the reason for the difference, assuming that the difference is a reliable one. I think that the clue is obtained from another study we conducted in connection with students studying Russian.

At the end of the course when the instructors evaluated the language proficiency of the students, they were also asked to provide us with ratings of each student's personality and work habits, in terms of the following descriptions:

Ability to Work and Get Along With Others

Interest and Enthusiasm in His Work

Ability to Grasp Instructions and Plans

Strives to Improve His Work

Judgment and Common Sense

Ability to Obtain Results and Get Things Done

Initiative

Thorough and Attentive to Necessary Details

A personality and work habit rating-score was derived for each student and these scores were correlated with the evaluation ratings for language proficiency at the end of the course. In 154 cases, covering 13 different classes, we obtained statistically significant correlations in 11 of the classes, and these statistically significant correlations varied from .66 to .94. For all of the 13 classes the Mean (Z'-corrected) correlation was .71, significant, as the statisticians say, at the one percent level. Now, how can we tie this up with what we have already said?

There are a number of possible interpretations but for the moment I should like to call your attention to one interpretation which we can draw from these statistics, an interpretation with which no linguistic scientist or language instructor could possibly quarrel, namely, that personality and work habits, what in the jargon of some psychologists are called "non-intellectual factors," are important in the learning of languages.

And here we come to the crux of the problem. I believe that

the individual analysis has greater predictive efficiency than the group testing approach, be it Iowa or any other test, because the psychologist in making his predictions on the basis of clinical data, which include test scores, takes into account non-intellectual as well as intellectual factors. Attitudes, motivation, age, energy potential, rigidity of thinking, perseverance, capacity of the individual to make new adjustments, all these things and many more, are important in learning languages.

I believe that the intellectual factors beyond a certain point add little to language learning in the standardized instructional programs. An intellectual basis for language learning is indispensable. We don't have to be told that. And, of course, we know that as you increase the pace and pressure in a language course, you want brighter students who can pick up the stimuli and react to them more quickly. But to speak in conventional symbols, of what value is an IQ of 200 or 180 or 160 in the usual intensive language course? Are the possessors of such IQ's, for that reason, better off than the usual 120 to 140 Government employee who is permitted to take a language course? I believe not. I believe there is a law of diminishing returns for intellectual capacities beyond a certain point, and that other more critical factors come into play, some of which I have mentioned already.

In order for us to get to know these factors better, and the roles they play in language learning, I would recommend as an important part of our studies of language learning that we undertake careful, analytic psychological and language achievement case studies of students, such case studies being compiled by the linguistic scientist and the psychologist working as a team. I think that by such methods the direction which research should take on language learning could be plotted more accurately, and permit us more readily to rid ourselves of the notion that there is an intellectual faculty, a unitary trait, "language aptitude." There is no such thing as language aptitude. There are, however, many intellectual and personality traits and work habits which in particular environmental situations can be combined, used, and developed to make it possible for the individual to acquire a new set of habits which we call language.

If this particular research team approach which I have stressed is put into use, the knowledge, the clues, the insights and intuitions, if you will, which the linguistic scientists have acquired through their everyday, practical intimacy with problems of language learning will be made available to the psychologist (who should combine both research and clinical skills), and he can then engage in more accurate evaluations of a student's potentialities. Combining this knowledge with results from work-sample-situations (more often known as tests), the psychologist will be able to do more than merely predict how well the student will perform in a particular course. He will be able to estimate the optimum performance of which the student is capable, and to advise both student

and instructor as to the means by which his optimum performance may be attained.

What I have recommended will, I feel certain, come about. It's just a matter of time. This nation will some day wake up to the importance of foreign languages in the effective conduct of our international policies, and greater opportunities and wider programs will be available to its citizens, whether in or out of Government, to study foreign languages both here in this Country and abroad. You have the opportunities as linguistic scientists to develop and tool up on your predictive techniques in anticipation of those action demands for more extensive and intensive language instruction which will some day be forced upon you. Much needs to be done, because so little is known, and that which is known about predicting language learning is not well organized at all. What I recommend is the cementing of an alliance between linguistic scientists and psychologists. I have in mind especially those psychologists who have knowledge of and respect for research but whose primary interest is the use of their knowledge in helping to adjust human beings to their environments, particularly when the environment is associated with learning a language. If you cannot find such people to help you in your studies of language learning, then I suggest that you breed them in the sense that you alert the American Psychological Association to your needs, and try to work out with that Association a program for the graduate training of psychologists who will be equipped to work in the field of linguistic science.

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